PIMMIT RUN BRIDGE
George Washington Memorial Parkway, spanning Pimmit Run
McLean Vicinity
Fairfax County
Virginia

HAER No. VA-74

HAER
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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

PHOTOGRAPHS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

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I. INTRODUCTION

Location:	George Washington Memorial Parkway milepost 4.51, 4.6 miles from Interstate 495; carries GWMP over Pimmit Run, a tributary to the Potomac River in Fairfax County.
FHwA Structure No.:	3300-005P.
Date of Construction:	1957-1959.
Type:	Continuous steel plate girder bridge.
Designer:	Bureau of Public Roads (BPR)-- Region 13, Bridge Engineering Division National Park Service (NPS)-- National Capital Parks, Architectural Branch.A.F. Ghiglione, BPR Regional Engineer. William Haussmann, NPS Chief Architect.
Contractor:	Wright Contracting Company.
Present Owner:	National Capital Region, National Park Service.
Present Use:	Carries non-commercial GWMP traffic over Pimmit Run.
Significance:	Built as part of a project to extend the GWMP closer to a proposed terminus at Great Falls, Virginia.
Project Information:	Documentation of the George Washington Memorial Parkway and Clara Barton Parkway was undertaken as a multi-year project by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER), a combined division of the National Park Service, Robert Kapsch, Chief. The project was sponsored by the Park Roads Program of the National Park Service, John Gingles, Deputy Chief, Engineering and Safety Services Division. The Project Supervisor was Sara Amy Leach, HABS Historian. Bridge reports were prepared by Elizabeth M. Nolin (1988); Michael P. Kucher (University of Delaware, 1993); and Jennifer P. Wentzien (University of Washington, 1994). HABS Report No. VA-69 prepared by Timothy Davis (University of Texas) provides an overview history of the entire parkway project. Jack E. Boucher and Jet Lowe produced the large-format photographs. The Washington-based summer 1994 documentation team was headed by landscape architect Tim Mackey (Harvard University, Graduate School of Design).

II. HISTORY

Pimmit Run Bridge is one of several structures designed and built in the 1950s to carry the George Washington Memorial Parkway (GWMP) to the CIA in Langley, Virginia. The structure was completed on the same contract as the Glebe Road Bridge (HAER No. VA-75). The bridge is located between Glebe Road and Route 123 on the northern segment of the parkway.

The architectural design of the bridge reflects the popular aesthetic of the period succinctly described by Christopher Tunnard as "the lighter and cleaner the silhouette, the better the design."[1] These ideals are expressed at Pimmit Run and other GWMP bridges of the period in the design of metal railings, cantilevered "T" shaped piers, and a reliance on structural details for ornamentation. These ideals are in many ways the antithesis of those of Gilmore Clarke for earlier parkway bridges, as expressed in the quotation, "the more rugged the scenery and the surroundings, the more rustic may be the bridge."[2] The continued influence of the rustic style is evident in the stone-faced guardwalls along approaches to the bridge. However, the irregular stone facing and lack of a granite coping is somewhat cruder than the masonry detailing of earlier parkway bridges.

Description

Pimmit Run Bridge is a continuous three span steel girder structure resting on concrete piers and abutments. The center span is 132' with side spans of 106'. The overall length including wing walls is 424'. The GWMP roadway is two 24' lanes separated by a 6' median with 2' wide low curbs and 2'-6" sidewalks. The overall width is 68'.

The bridge is built over rugged terrain on steep slopes of mica schist. Deep footings were placed over leveling courses necessary on the steep slopes.[3] Reinforced concrete abutments and wing walls are built on counterfort type footings and three "T" shaped reinforced concrete piers are built on spread footings. The pier cross beams are 6' wide and cantilever 22'-6" from the stem. The pier stems are 6' wide and 20' long with rounded ends. Formwork for the concrete was structural steel with plywood lining. Ready mix concrete was supplied by Howat Concrete Company of Washington D.C. The heavily reinforced concrete cantilever cross beam of the "T" shaped pier provides a seat for the steel girders. Structural steel was furnished and fabricated by the Phoenix Bridge Co., Phoenixville, PA. The continuous steel plate girder and floor beam system in turn support the reinforced concrete deck slab. L.B. Foster Company of New York furnished and installed the Alcoa brand cast aluminum railings.

The bridge is designed for a standard H-20 loading of the American Association of State Highway Officials. Final construction costs reported for the combined contract for Pimmit Run Bridge and Glebe Road Bridge were $1,141,196.75 with an additional $42,685 for engineering.

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[1]Christopher Tunnard, Man-made America: Chaos or Control?, 1963, p. 244.

[2]Gilmore Clarke, "Architecture of Short Span Bridges," from Arthur G. Hayden, The Rigid Frame Bridge, p. 227.

[3]U.S. Department of Commerce, Bureau of Public Roads, "Final Construction Report Project 1A9-10," 1959.

Alterations

In 1972 a concrete bridge railing was installed in front of existing aluminum rail in compliance with new code requirements. A textured spray coating was applied to provide salt protection and uniform color and appearance. The same repair was made to Rt. 123 Overpass.[4]

Ill. SOURCES

Hayden, Arthur G. The Rigid Frame Bridge. 1931. 3rd edition, 1950. Article by Gilmore Clarke, "The Architecture of Short-Span Bridges," pp. 219-240.

Tunnard, Christopher. Man-made America: Chaos or Control? Yale University Press. 1963.

U.S. Department of Commerce, Bureau of Public Roads. Plans for Proposed Project 1A8 (abutments), 1A10, 1A35, 1A44. Microfiche reductions of original construction drawings on file at National Capital Region Park Headquarters, National Park Service, Washington D.C.

U.S. Department of Commerce, Bureau of Public Roads. "Final Construction Report, George Washington Memorial Parkway, Project 1A9-10, Steel Viaducts over Glebe Road and Pimmit Run, Arlington and Fairfax County, Virginia," Submitted by D. Hugh Brown, Resident Engineer, 14 October 1959, on deposit at FHWA, Sterling, Virginia.

U.S. Department of the Interior, Historic American Buildings Survey (HABS), No. VA-69, "George Washington Memorial Parkway," 1994. Prints and Photographs Division, Library of Congress, Washington D.C.

[4]"Final Construction Report Project 1A35," 1972.